

SUB
C
A1
volume of 0.2 to 5 ml/g, and a nucleic acid extraction solution for allowing the nucleic acids to adsorb to the particulate carrier, to thereby bind the nucleic acids to the particulate carrier;

(b) separating a composite of the nucleic acids and the particulate carrier from the mixture obtained in Step (a) to remove contaminants; and

(c) eluting and collecting the nucleic acids from the composite of the nucleic acids and the particulate carrier.

A2
9. (Amended) A method according to Claim 1 wherein the nucleic acids are at least one member selected from the group consisting of DNA and RNA.

A3
14. (Amended) A method according to Claim 12 wherein the chaotropic substance is at least one member selected from the group consisting of guanidine thiocyanate and guanidine hydrochloride.

REMARKS

The claims have been amended to address the outstanding rejections under 35 U.S.C. §§ 112 and 102(e). Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections in view of the foregoing amendments and the remarks that follow.

The invention of claim 1 is characterized by using a particulate carrier having a particle diameter of 0.5 to 15.0 μm , a pore diameter of 80 to 250 nm and a pore volume of 0.2 to 5 ml/g.

According to the prior art, nucleic acids may be extracted or isolated from a sample containing impurities by binding the nucleic acids to nucleic acid-binding magnetic silica particles and then collecting the nucleic acids. However, when the sample contains an extremely large amount of impurities, the impurities can cover the surfaces of the silica particles, thereby lowering the nucleic acids adsorption efficiency.